Intro to Stats Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Chapter 3 Notes

Section 3.2

Normal Distributions

1. Density curves that are symmetric, single-peaked, and bell-shaped are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and they describe \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Distributions that are often close to Normal include:

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Normal curves have these properties:

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. In any Normal distribution, approximately

* \_\_\_\_\_\_\_ of the observations fall within \_\_\_\_\_\_\_\_\_\_\_\_ standard deviation of the mean.
* \_\_\_\_\_\_\_ of the observations fall within \_\_\_\_\_\_\_\_\_\_\_\_ standard deviations of the mean.
* \_\_\_\_\_\_\_ of the observations fall within \_\_\_\_\_\_\_\_\_\_\_\_ standard deviations of the mean.

1. The usual notation for the mean of a density curve is \_\_\_\_\_\_\_.
2. We write the standard deviation of a density curve as \_\_\_\_\_\_\_.
3. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ gives areas under the standard Normal curve.
4. Solving problems involving Norma distributions:

* Step 1: *State the \_\_\_\_\_\_\_\_\_\_\_\_\_\_*
* Step 2: *Standardize and draw a picture*
* Step 3: *Use the \_\_\_\_\_\_\_\_\_\_*
* Step 4: *Conclusion*

1. All normal distributions obey the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ rule.

Problems: 24, 25, 26, 27, 29, 31, 33, 37, 39, 44, 47, 48, 54, 56